Applicant's arguments with respect to claims 1-24,27-31,33,62-63, and 65-66 have been considered but are moot in view of the new ground(s) of rejection.

The Status of Claims:

Claims 1-24,27-31,33,36,38-40,42-43,45-66 are pending.

Claims 1-24,27-31,33,62-63, and 65-66 are rejected.

Claims 36, 38-40,42-43,45-60 are withdrawn from consideration.

DETAILED ACTION

1. Claims 1-24,27-31,33,62-63, and 65-66 are under consideration in this Office Action.

Priority

2. It is noted that the application is a CIP of PCT/US03/07377 (03/07/2003) which claims benefit of 60/362,883 (03/08/2002 and claims benefit of 60/380,711 (05/14/2002).

Drawings

3. None.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-24,27-31,33,62-63, and 65-66 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 2, the terms "heteroaryl moiety" is recited. These are vague and indefinite because those terms need to be defined clearly for how many carbon and hetero atom members of the ring system are present in the ring.

In claim 1 , the term " substituted" is recited. This term Is vague and indefinite because in the absence of the specific moieties intended to effectuate modification by the "substitution" or attachment to the chemical core claimed, the term "substituted" renders the claims in which it appears indefinite in all occurrences wherein applicants fails to articulate by chemical name, structural formula or sufficiently distinct functional language, the particular moieties applicants regards as those which will facilitate substitution, requisite to identifying the composition of matter claimed.

In claim 1, the phrase " the compound is present in an amount effective to inhibit production of a pro-inflammatory and /or immunologic cytokine" is recited. This is vague and indefinite because it is a hybrid claim containing the compound claim and the method of treatment. the examiner recommends to separate it into two different claims.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-24,27-31,33,62-63, and 65-66 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In claim 1, the phrase " the compound is present in an amount effective to inhibit production of a ***pro-inflammatory and /or immunologic cytokine***" is recited. However, the specification does not describe how to inhibit production of ***pro-inflammatory and /or immunologic cytokine*** and also, there are no showings of any evidence for inhibiting production of all ***pro-inflammatory and /or immunologic cytokine*** at the same time. Furthermore, the contemporary knowledge of the art does not teach " how to inhibit" for all the alleged ***pro-inflammatory diseases***. If we could prevent all the possible permutations and combinations of the above, nobody would be sick. In addition, more than routine experimentation is involved. See In re Armbruster 185 USPQ 204 (CCPA 1985) and Angstadt et al. , 190 USPQ 152 (CCPA 1990). Therefore, the specification has failed to support enablement for inhibiting the

production of a ***pro-inflammatory and /or immunologic cytokine***". Therefore, an appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

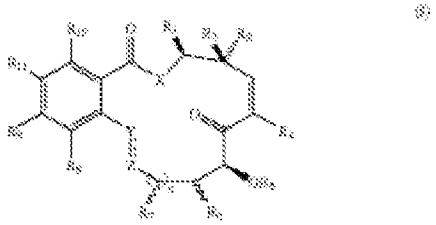
A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-24,27-31,33,62-63, and 65-66 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-22,40,43,66, and 81 of copending Application No. 10/507,067. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are overlapped in a genus and a species relationship.

In the instant claim 1, the following limitations are described as below:

A pharmaceutical composition for systemic administration comprising a compound having the structure:

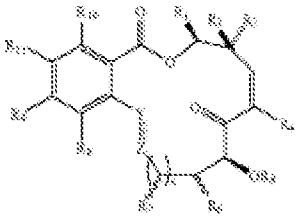


or pharmaceutically acceptable derivative thereof;

R1-R11 are defined; X is equal to oxygen; Y and Z are carbon.

However, the instant invention differs from the copending application in the followings:

A compound having the structure:



X is absent or is O, NH, N-alkyl, CH_2 or S;

Y is CHR_{17}, O, C=O, CR_{17} or NR_{17}; and Z is CHR_{18}, O, C=O, CR_{18} or NR_{18}, wherein each occurrence of R_{17}

R1-R11 are defined;

The limitations of the co-pending application is broader than the instant invention. Therefore, they are in a genus and a species relationship. Therefore, it would have been obvious to the skilled artisan in the art to be motivated to emphasize the species from the genus of the formula.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

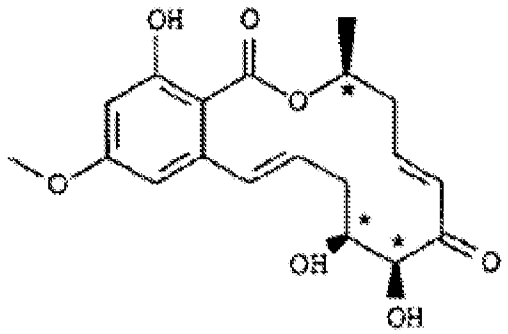
> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3, 6-7, 8-9, 11,13, and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dreyfuss et al (EP 0606044).

Dreyfuss et al discloses the following compound having cytokine inhibitor properties applicable to the pharmaceutical application (see page 6 at the top):



.

However, the instant invention differs from the prior art in that R2 is a methyl group instead of hydrogen shown in the prior art.

Even so, the relationship between the prior art and the claimed compound is homologous to each other. It is well-established that the substitution of methyl for hydrogen on a known compound is not a patentable modification absent unexpected or unobvious results. In re Wood, 582 F.2d 638, 199 U.S.P.Q. 137 (C.C.P.A. 1978); In re Hoke, 560 F. 2d 436, 195 U.S.P.Q. 148 (C.C.P.A. 1977). Therefore, it would have been obvious to the skilled artisan in the art to be motivated to change from the prior art compound to the claimed compound in order to make the prior art compound more lipophilic for the fast absorption into the cells during the drug delivery because the skilled artisan in the art would expect such a modification to be successful and feasible.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taylor Victor Oh whose telephone number is 571-272-0689. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on 571-272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Taylor Victor Oh, MSD, LAC
Primary Examiner
Art Unit: 1625

/Taylor Victor Oh/

Primary Examiner, Art Unit 1625

6/20/08